

WHAT IS CLAIMED IS:

1. An information display system for displaying service information concerning to at least one of events existing in a service section set for a road received from a road
5 infrastructure, comprising:

a communication apparatus for receiving the service information transmitted from the road infrastructure;

10 a computer for determining at least one of symbols based upon the received service information, and for controlling a display position and display timing for the determined symbol, each symbol corresponding to each the event existing in the service section; and

15 a display apparatus for displaying the determined symbol in response to an output from the computer,

wherein the computer controls the display apparatus so as to display all of the events existing between a position of a vehicle and an end position of the service section by first display object symbols in a first display area, and

20 wherein the computer calculates the display timing based on the position and the contents for each of the events existing in the service section, and controls the display apparatus so as to display a second display object symbol having a display size larger than that of the first display object symbols in a second display area different from the first display area,
25 the symbol as the second display object symbol being displayed

when the vehicle reaches to a position corresponding to the calculated display timing for each of the events.

2. An information display system according to claim 1,
5 wherein the computer controls the display apparatus so as to continue to display each of first display object symbol in the first display area until the vehicle passes the event corresponding to each the symbol, and continue to display the symbol as the second display object symbols in the second display
10 area until the vehicle passes the event corresponding to the symbol.

3. An information display system according to claim 1,
wherein the computer controls the display apparatus so as to
15 display the display positions of the first display object symbols associated with a position of the vehicle in the service section and position of each the events existing in the service section.

4. An information display system according to claim 1,
20 wherein, when there are two or more symbols to be displayed as the second display object symbol, the computer controls the display apparatus so as to display the respective symbols hierarchically and make the positions offset from each other, and controls the display apparatus so as to display a
25 hierarchical arrangement from a symbol displayed in the

forefront to a symbol displayed in the rear end corresponding to an order of the vehicle reaching the respective events corresponding to the symbols.

5 5. An information display system according to claim 4, wherein the computer controls the display apparatus such that a display size of the symbol displayed in the rear end is smaller than that of the symbol displayed in the forefront.

10 6. An information display system according to claim 1, wherein the computer specifies an upper limit value of the number of symbols which can be displayed in the second display area, and when the number of the second display object symbols is larger than a predetermined value, the computer controls the 15 display apparatus so as to select the symbols equivalent to the predetermined value in the second display object symbols and display the selected symbols in order from the one whose position in the service section corresponding to the display timing is closest to the position of the vehicle.

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7. An information display system according to claim 1, wherein the computer controls the display apparatus such that start points or end points in an arrangement direction from a symbol displayed on the rear end to a symbol displayed in 25 the forefront in the second display area and a time-series

arrangement direction of symbols displayed as the first display object symbols in the first display area coincide with each other.

5 8. An information display system according to claim 1, wherein the computer controls the display apparatus so as to display symbols associating an arrangement direction from a symbol displayed on the rear end to a symbol displayed in the forefront in the second display area and a time-series 10 arrangement direction of symbols displayed as the first display object symbols in the first display area with each other.

9. An information display system for displaying service information concerning to at least one of events existing in 15 a service section set for a road received from a road infrastructure, comprising:

 a communication apparatus for receiving the service information transmitted from the road infrastructure;

20 a computer for determining at least one of symbols based upon the received service information, each symbol corresponding to each event existing in the service section, and for controlling a display position and display timing for the determined symbol; and

25 a display apparatus for displaying the determined symbol in response to an output from the computer,

wherein the computer controls the display apparatus so as to display first display object symbols in a first display area, the first display object symbols including the symbols corresponding to all of the events existing between a position 5 of a vehicle and an end position of the service section, and wherein the computer calculates the display timing based on the position and the contents for each the event existing in the service section, and controls the display apparatus so as to hierarchically display a predetermined number of events 10 in an order of earliness of the display timing in the second display area.

10. An information display method for displaying service information for at least one of events existing in a service 15 section set for a road received from a road infrastructure, comprising:

a first step of displaying all of the events existing between a position of a vehicle and an end position of the service section;

20 a second step of calculating display timing for displaying at least one of symbols in a second display area different from the first display area based upon the position and the contents for each of the events existing in the service section, each symbol corresponding to each the event; and

25 a third step of displaying the determined symbol

corresponding to the display timing as second display object symbol having a display size larger than that of the first display object symbol in the second display area, when the vehicle reaches to a position corresponding to the calculated display 5 timing for each of the events.

11. An information display method according to claim 10, wherein in the first step, the symbol as the first display object symbol is displayed in the first display area until the vehicle 10 passes the event corresponding to the symbol, and

in third step, the symbol as the second display object symbol is displayed in the second display area until the vehicle passes the event corresponding to the symbol.

15 12. An information display method according to claim 10, wherein in the first step, the display positions of the first display object symbols are associated with a position of the vehicle in the service section and positions of the events existing in the service section.

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13. An information display method according to claim 10, wherein, in third step, when there are two or more symbols as the second display object symbols, the respective symbols are hierarchically displayed with a positional offset, and a 25 hierarchical arrangement from the symbol displayed in the

forefront to the symbol displayed in the rear end corresponding to an order of the vehicle reaching the respective events corresponding to the symbols.